1865.] DR. A. GÜNTHER ON AUSTRALIAN PIPE-FISHES.

et ad basin mand. inferioris albicante : pedibus obscure cinereis.

Long. tota 4.8, alæ 2.6, caudæ 1.9, rostri a rictu 0.55, tarsi 0.7 poll. Angl.

Hab. Madagascar.

One example of this bird was obtained by Mr. F. Plant in the forests near Anooivarika.

8. ON THE PIPE-FISHES BELONGING TO THE GENUS PHYLLO-PTERYX. BY ALBERT GÜNTHER, M.A., PH.D., M.D., F.Z.S.

(Plates XIV., XV.)

Many Pipe-fishes are provided with short or thin cutaneous appendages, symmetrically disposed on the different dermal scntes. These appendages are most developed in the species which may be referred to the genus *Phyllopteryx* (Swains.), Kaup. The first of these extraordinary forms was described and indifferently figured by Shaw (Zool. v. pl. 180). He named it *Syngnathus foliatus*, which name must be preferred to that given in the same year by Lacépède (*Syngnathus tæniopterus*, Ann. Mus. iv. pl. 58. f. 3), since the author of a work may be presumed to have named the species at a much earlier period than the writer of a memoir.

The British Museum possesses, among others, a fine example, $13\frac{1}{2}$ inches long, of this *Phyllopteryx foliata* from Tasmania; and there is a beautiful coloured figure in the collection of drawings made by Ferdinand Baner, Dr. Brown's companion during Capt. Flinders's voyage. The figure of this species (Pl. XIV.) is two-thirds of the natural size, the coloration being taken from Bauer's drawing.

A second species was described by Dr. Gray as *Haliichthys* tæniophorus in 'Proc. Zool. Soc.' 1859, p. 38, and figured pl. VII.; it is from Freycinet's Harbour.

A third species has been lately presented to the British Museum by Mr. George French Angas, who received it from Port Lincoln, South Australia. I name it *Phyllopteryx eques* (Pl. XV.). Its form is still more extraordinary than that of the preceding species, the spines, crest, and cutaneous appendages being much more developed, and the trunk being dilated into an upper and three lower prominences. The snont is as long as the distance of the front margin of the orbit from the hind part of the nape; it bears a pair of small spines behind the middle of its upper edge, a pair of minute barbels at the chin, and a pair of long appendages in the middle of its lower part. The forchead bears an erect, broad, subquadrangular crest, with a shorter single spine behind; a horizontal spine above each orbit; a cluster of spines with narrow appendages on the occiput. Nape of the neck with a long spine, dilated at the base into a crest, and carrying a long bifid appendage.

The trunk is compressed, somewhat dilated, strongly arched on the back, and with two deep indentations in its lower profile. There

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are seventeen bony rings between the pectoral fin and the root of the tail. The spines are of three kinds: 1. The band-bearing spines are the strongest, strongly compressed, not flexible, each terminating in a pair of short points. There are one pair of these spines in the middle of the back, and one on each of the three prominences of the abdominal outline; the flaps are long and bifid. 2. Very long, compressed, and somewhat flexible spines, without appendages; these occupy in pairs the uppermost part of the back, and in a single series the median line of the belly. 3. Small, short, conical spines run in single series along the median line of the sides, and along the lateral edges of the belly; a pair of similar spines in front of the lower part of the base of the pectoral fin.

Tail quadrangular, with sharp edges, and with five pairs of bandbearing spines along its upper side; its end is slightly prehensile.

P. 20. D. 37. The dorsal is situated entirely on the tail.

The specimen, being dry, has lost its original colours, which were probably red during life. The iris is crossed by radiating streaks; and several other streaks (of a whitish colour) radiate from the eye over the opercles and the upper part of the head.

There is no doubt that these fish attach themselves with the prehensile end of their tail to stems of seaweed or other objects; and when they are in the vicinity of seaweed of a similar colour, their resemblance to it must be so great that they would easily escape being observed by their enemies. The figure of P. eques (Plate XV.) is of the natural size.

April 11, 1865.

Professor T. H. Huxley, F.R.S., V.P., in the Chair.

Dr. Crisp exhibited a drawing of the placenta of the Giraffe lately obtained from the Society's Gardens. It weighed $13\frac{1}{2}$ lbs., and contained 156 cotyledons. Dr. Crisp said that the cotyledons of the Ox and Sheep were said to number from 70 to 100. In the placenta of a Dorcas Gazelle (*G. dorcas*) he had counted only 30; so that probably the Giraffe had a larger number than any other of the ruminants.

Dr. Crisp also exhibited a drawing of the Aard-Vark (*Orycteropus capensis*). He had obtained the animal in the flesh; and the drawing was placed before the Society to show the enormous muscular power of this quadruped, especially in the tail and in the extremities. The weight of the body was about 90 lbs. Dr. Crisp purposed bringing the anatomy of the Aard-Vark before the Society on a future occasion.

The following papers were read :---